

#### STATE OF WASHINGTON

#### DEPARTMENT OF INFORMATION SERVICES

Olympia, Washington 98504-2445

November 10, 2005

TO: Robin Campbell

Office of Management Accountability and Performance

**FROM:** Gary Robinson, Director

SUBJECT: August 10 GMAP Session Follow-Up

In response to the issues raised at the August 10, 2005 GMAP session, the Department of Information Services (DIS) has taken the actions reviewed in the memorandum and the referenced attachments.

1. <u>Identify best practices that could be made mandatory for information technology projects</u>. Below is an excerpt of how DIS and agencies are applying success factors to current projects. DIS and agency actions on success factors are in Attachments A and D.

Success Factor	DIS Actions	Agency Example
Clear Business Objectives	Feasibility Studies and Investment Plans will include business and success metrics	Timely, accurate paychecks (HRMS)
	Projects will be evaluated against success metrics, including business objectives	Support civil service reform and collective bargaining (HRMS)
Minimized Scope	DIS will evaluate original scope and recommend incremental approvals when appropriate	Formal change request process for estimating impact of scope changes (MMIS)
	DIS will evaluate scope changes against original business objectives to eliminate scope creep	Gated approach - phased progression of milestone approval by executive sponsors (OMNI)
Formal Methodology	Use Project Management Framework methodologies endorsed by the Information Services Board	Formal governance and control processes used to manage scope, schedule, budget; vendor CMM level 2 certified (MMIS)
		Employing Project Management Framework endorsed by ISB (OMNI)

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- 2. <u>Develop management measures that transcend any given project</u>. Attachment B describes how project health will be evaluated during and at the conclusion of the project, including metrics.
- 3. <u>Can there be specific targets and action plans?</u> Attachment A details the DIS action plan and Attachment D provides examples from the HRMS, MMIS and OMNI project action plans that include targets.

#### **Attachments**

Attachment A is the complete listing of DIS actions on success factors.

Attachment B outlines the proposed criteria developed by DIS to promote consistency in evaluating the health of an information technology project. These criteria, coupled with DIS staff evaluations, will be the basis for the assessment.

Attachment C is a description of the success factors and a sample success factor scoring matrix that will be used to determine how well projects are managing. Each success factor is scored by the Executive Sponsor(s), project team, Independent Quality Assurance and DIS staff then averaged and reported.

Attachment D lists the some of the actions agencies are taking to ensure success of the state's three largest information technology projects: Human Resource Management System, Medicaid Management Information System (now ProviderOne), and the Offender Management Network Information system. These actions are based on the success factors established in Attachment B and described in Attachment C.

Attachments

cc: Tracy Guerin Matthew Krieger

### **DIS Actions on Success Factors**

Success Factor	Actions	Timeline
User Involvement	<ul> <li>Investment plans and project charters must demonstrate evidence of business user involvement for DIS to approve the project</li> </ul>	■ Began Sep 05
Executive Management Support	<ul> <li>DIS Director participates on all major project steering committees</li> </ul>	■ Began Feb 05
Experienced Project Manager	<ul> <li>DIS will evaluate the merits of a Statewide Project Management Office</li> </ul>	<ul><li>Evaluation will be complete Dec 05</li></ul>
	<ul> <li>DIS will participate in hiring agency project staff</li> </ul>	<ul><li>Began Aug 05</li></ul>
Clear Business Objectives	<ul> <li>Feasibility Studies and Investment Plans will include business and success metrics</li> <li>Projects will be evaluated against success metrics, including business objectives</li> </ul>	<ul><li>Began Oct 05</li><li>Will begin Nov 05</li></ul>
Minimized Scope	<ul> <li>DIS will evaluate original scope and recommend incremental approvals when appropriate</li> <li>DIS will evaluate scope changes against original business objectives to eliminate scope creep</li> </ul>	<ul><li>Began Feb 05</li><li>Began Feb 05</li></ul>
Agile Business Requirements	<ul> <li>Investment plans will be reviewed for evidence of documented, complete requirements before being approved</li> </ul>	■ Began Sep 05
Standard Infrastructure	<ul> <li>Investment Plans are reviewed for compatibility with enterprise initiatives and architecture prior to approval</li> </ul>	■ Began Feb 05
Formal Methodology	<ul> <li>Use Project Management Framework methodologies endorsed by the Information Services Board</li> </ul>	■ Began Feb 05
Reliable Estimates	<ul> <li>Use of Requests for Information and solid research for estimates</li> </ul>	■ Began Sep 05
Skilled Staff	<ul> <li>DIS is developing a list of "preferred characteristics" for project staff to be shared with agencies.</li> </ul>	■ Nov 05
Contract Negotiation and Management	<ul> <li>DIS will post Request for Information and Request for Proposal checklists on ISB Website</li> <li>DIS recommends use of the ISB website which has sample contracts and other pertinent information</li> </ul>	<ul><li>Posted Nov 05</li><li>Began Feb 05</li></ul>
Implementation	<ul> <li>Investment Plans will be reviewed for evidence of documented implementation and training strategy</li> </ul>	■ Nov 05
Other	<ul> <li>Common assessment criteria is used for evaluating project viability and success</li> <li>Evaluate methods to confirm benefits of IT investments</li> <li>Executive Sponsors, Project Teams, DIS consultants and Quality Assurance will regularly evaluate the projects responsiveness to success factors</li> </ul>	<ul><li>Nov 05</li><li>Complete Jan 06</li><li>Nov 05</li></ul>

Sources for Success Factors: The Standish Group (2004), and Washington State post-implementation reviews

### Proposed Project *Outlook* Indicators

These proposed criteria would be applied by DIS staff on a regular basis, to accurately depict the status of a current project at a specific point in time.

Dashboard Area	Green	Yellow	Red
Scope	<ul> <li>Total cost of all change requests is 50% or less of change request budget, and</li> <li>All major system components will be implemented as planned</li> </ul>	<ul> <li>Total cost of all change requests is 75% or less of change request budget, or</li> <li>Major system component will be deferred to later phase in order to meet current phase's schedule or budget</li> </ul>	<ul> <li>Total cost of all change requests is at least 75% of the change request budget, or</li> <li>Major system component will not be implemented</li> </ul>
Schedule	<ul> <li>Schedule variance does not impact completion date for current phase, and</li> <li>Workplan is updated at least once every two weeks</li> </ul>	<ul> <li>Schedule variance delays completion date for current phase but does not impact completion date for later phases or critical path, or</li> <li>Major deliverable will be late by 2 weeks or less, or</li> <li>Workplan has not been updated within last 30 days</li> </ul>	<ul> <li>Schedule variance affects critical path, or</li> <li>Major deliverable will be at least two weeks late, or</li> <li>Workplan has not been updated for more than 30 days</li> </ul>
Budget	<ul> <li>Budget variance is less than 5% of total budget and there is project funding flexibility within the agency's control</li> </ul>	<ul> <li>Budget variance is less than 10% of total budget and there is project funding flexibility within the agency's control</li> </ul>	variance and there is no remaining project
Success Factors*	<ul><li>Weighted score is at least 90%</li></ul>	<ul><li>Weighted score is at least 80%</li></ul>	<ul><li>Weighted score is less than 80%</li></ul>

### Proposed Project *Outcome* Indicators (as compared to original project plan)

DIS staff would use the following proposed criteria to evaluate information technology projects against the original project plan.

Dashboard Area	Green	Yellow	Red
Scope	<ul> <li>Project satisfies at least</li></ul>	<ul> <li>Project satisfied at least</li></ul>	<ul> <li>Project satisfies less</li></ul>
	95% of all business	90% of all business	than 90% of all business
	objectives, and	objectives, and	objectives, or
	<ul> <li>All major system</li></ul>	<ul> <li>No more than one major</li></ul>	<ul> <li>At least one major</li></ul>
	components are	system component is	system component is not
	implemented as planned	deferred to later phase	implemented
Schedule	<ul> <li>Project completion no</li></ul>	<ul> <li>Project completion no later</li></ul>	<ul> <li>Project completion later</li></ul>
	later than 5% of original	than 10% of original	than 10% of original
	schedule duration	schedule duration	duration
Budget	Budget variance is less	<ul><li>Budget variance is less than</li></ul>	<ul> <li>Budget variance is at</li></ul>
	than 5% of total budget	10% of total budget	least 10% of total budget
Success Factors*	<ul><li>Weighted score is at least 95%</li></ul>	<ul><li>Weighted score is at least 90%</li></ul>	<ul> <li>Weighted score is less than 90%</li> </ul>

<sup>\*</sup>Ratings based on analyses by Executive Sponsor(s), Project Team, Independent Quality Assurance consultants and DIS consultant staff.

### **Project Critical Success Factors**

All of these critical success factors except the last two are from the Standish Group's study of successful and unsuccessful projects. The last two factors, Contract Negotiation & Management and Implementation are lessons learned from Washington State Information Technology projects. The following page takes these success factors and proposes a method for assigning a green, yellow, or red indicator to this category.

- <u>Executive Support:</u> The Executive Sponsor must have a global view of the project, set the agenda, arrange the funding, articulate the project's overall objectives, be an ardent supporter, be responsive and finally, be accountable for the projects success.
- <u>User Involvement:</u> Primary users must have good communication skills allowing them to clearly explain business processes in detail to the IT organization. Primary users should also be trained to follow project management protocols. Finally, users must be realists and aware of the limitations of the projects.
- <u>Experienced Project Manager:</u> Project Managers must possess technology and business knowledge, judgment, negotiation, good communication and organization. The focus is on softer skills, such as diplomacy and time management.
- <u>Clear Business Objectives:</u> The project objectives must be clearly defined and understood throughout the organization. Projects must be measured against these objectives regularly to provide an opportunity for early recognition and correction of problems, justification for resources and funding, and preventive planning on future projects.
- <u>Minimized Scope</u>: Scope must be realistic and able to be accomplished within the identified project duration and measured regularly to eliminate scope creep.
- <u>Agile Business Requirements Process:</u> Requirements management is the process of identifying, documenting, communicating, tracking and managing project requirements, as well as changes to those requirements. Agile requirements process is the ability to do requirements management quickly and without major conflicts. This is an ongoing process and must stay in lockstep with the development process.
- <u>Standard Infrastructure:</u> Establish a standard technology infrastructure that includes operational and organizational protocols. This infrastructure must be commonly understood and regularly assessed.
- <u>Formal Methodology:</u> Following formal methodology provides a realistic picture of the project and the resource commitment. Certain steps and procedures are reproducible and reusable maximizing project-wide consistency.
- Reliable Estimates: Be realistic.
- <u>Skilled Staff:</u> Properly identify the required competencies, the required level of experience and expertise for each identified skill, the number of resources needed within the given skill, and when these will be needed. Soft skills are equally important when identifying competencies.
- <u>Contract Negotiation and Management:</u> The Standish Group did not identify this as a success factor, however, based on lessons learned from Washington State projects, Contract Negotiation and Management plays a major role in project outcomes.
- <u>Implementation:</u> The Standish Group did not identify this as a success factor, however, based on lessons learned from Washington State projects, Implementation plays a major role in project outcomes.

## **Success Factors – Sample Assessment**

Success Factor	Standish Rank	Standish Weight	Assessment*	Score
Executive Support	1	18	3	54
User Involvement	2	16	3	48
Experienced Project Manager	3	14	3	42
Clear Business Objectives	4	12	2	24
Minimized Scope	5	10	2	20
Agile Requirements Process	6	8	2	16
Standard Infrastructure	7	6	3	18
Formal Methodology	8	6	2	12
Reliable Estimates	9	5	2	10
Skilled Staff	10	5	3	15
Contract Negotiations & Management	_	10**	3	30
Implementation	_	8**	2	16
TOTAL SCORE				301
WEIGHTED SCORE				86.5%

<sup>\*</sup>The assessment is 3, 2, or 1 for High, Medium, or Low. \*\*Weight assigned by DIS.

# Human Resource Management System (HRMS) Actions on Success Factors

Success Factor	Actions		
User Involvement	<ul> <li>Steering Committee involved in strategic decisions</li> </ul>		
	<ul> <li>Agency Change Agents and deployment teams contribute to planning and configuration activities</li> </ul>		
	<ul> <li>Agency staff participate as testers and trainers</li> </ul>		
Executive Management	<ul> <li>DOP and DIS Directors are co-executive sponsors</li> </ul>		
Support	<ul> <li>Director regularly communicates with Executive Cabinet, Small Agency Cabinet, and elected officials</li> </ul>		
	<ul> <li>Implemented sub-cabinet HRMS Steering Committee from the central support agencies</li> </ul>		
Experienced Project Manager	<ul> <li>Retained proven project manager with experience on similar projects.</li> </ul>		
Clear Business	<ul><li>Timely, accurate paychecks</li></ul>		
Objectives	<ul> <li>Support civil service reform and collective bargaining</li> </ul>		
Minimized Scope	<ul><li>Prioritized business objectives</li></ul>		
	<ul> <li>Developed comprehensive work plan, timeline, budget</li> </ul>		
	<ul><li>Locked down scope</li></ul>		
Contract Negotiation and	<ul> <li>Negotiated new contract with vendor in May</li> </ul>		
Management	<ul><li>Detailed workplan in place</li></ul>		
	<ul> <li>QA consultant on site</li> </ul>		

# MMIS (now ProviderOne) Actions on Success Factors

Success Factor	Actions
User Involvement	<ul> <li>Significant (200+) stakeholder participation; Deliverable acceptance by Administration delegates</li> </ul>
Executive Management Support	<ul> <li>DSHS Secretary, DIS Director and Asst. Secretaries guide and monitor project</li> </ul>
Experienced Project Manager	<ul> <li>Contract for Project Management services following unsuccessful inhouse recruitment</li> </ul>
Clear Business Objectives	<ul> <li>Guiding principles and objectives defined by DSHS Secretary and Asst. Secretaries</li> </ul>
Minimized Scope	<ul> <li>Formal change request process for estimating impact of scope changes</li> </ul>
Contract Negotiation and Management	<ul> <li>Nationally recognized law firm drafted contract and participated in negotiations – favorable contract for state</li> </ul>
Agile Requirements Process	<ul> <li>Requirements based approach throughout lifecycle; automated tools for tracking</li> </ul>
Standard Infrastructure	<ul> <li>Meets DIS and DSHS standards; platform/ protocols are standard to web industry</li> </ul>
Formal Methodology	<ul> <li>Formal governance and control processes used to manage scope, schedule, budget; vendor CMM level 2 certified</li> </ul>
Reliable Estimates	<ul> <li>Re-evaluate downstream estimates throughout lifecycle based on lessons learned</li> </ul>
Skilled Staff	<ul> <li>Re-assess resource needs throughout lifecycle based on lessons learned</li> </ul>
Implementation	<ul> <li>Ensure providers/staff are ready prior to cutover; employ a pilot and phased implementation</li> </ul>

# Offender Management Information System (OMNI)-Phase III Actions on Success Factors

Success Factor	Actions
User Involvement	<ul> <li>Business user group meetings will be scheduled <u>a minimum</u> of 1-2 times per week to discuss specifications and development work once IBM contract is in place</li> </ul>
Executive Management Support	<ul> <li>Executive sponsorship - DOC Secretary and DIS Director meeting once a week with project staff</li> <li>Steering Committee established with DOC Secretary, DOC business leaders, DIS &amp; IBM – meeting once a week</li> </ul>
Project Management	<ul> <li>Weekly meetings with DOC, DIS &amp; IBM to manage project scope, schedule and budget</li> <li>Experienced Project Director and Project Manager hired in October</li> </ul>
Clear Business Objectives	<ul> <li>Clear specifications will be developed by February 2006</li> <li>Weekly meetings will be used for project monitoring and quick issue resolution</li> </ul>
Realistic Scope and Specifications/ Reliable Estimates	<ul> <li>Weekly meetings with DOC Secretary, DOC business leaders , DIS and IBM to manage project scope, schedule and budget</li> <li>Focus on needs, not desirables - Transferring current OBTS functionality only</li> </ul>
Contract Negotiation and Management	<ul> <li>Substantive measurable deliverables defined in the contract</li> <li>Gated approach - phased progression of milestone approval by executive sponsors</li> </ul>
Standard Infrastructure	<ul> <li>Phase III builds on existing architecture</li> </ul>
Formal Methodology	<ul> <li>Employing Project Management Framework endorsed by ISB</li> </ul>
Skilled Staff	<ul> <li>DOC Project Director &amp; Project Manager - combination of 30+ years experience in project management</li> <li>Skilled DOC legacy system staff</li> <li>IBM is pursuing the return of key staff familiar with OMNI</li> <li>All OMNI state and contract project staff will be located in one facility</li> </ul>
Testing & Implementation	<ul> <li>Hire independent testing consulting firm to conduct or monitor all testing activities, and develop automated test scripts</li> <li>Develop implementation plan for customer use and DOC support of OMNI</li> </ul>

Attachment D